

Keegan Landfill  
02-8810-75-SI

CONFIDENTIAL-NOT FOR PUBLIC RELEASE

HRS

	s	s <sup>2</sup>
Groundwater Route Score (S <sub>gw</sub> )	3.58	12.82
Surface Water Route Score (S <sub>sw</sub> )	15.94	254.08
Air Route Score (S <sub>a</sub> )	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		266.90
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		16.34
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		9.45

WORKSHEET FOR COMPUTING S<sub>M</sub>

PRO

	s	s <sup>2</sup>
Groundwater Route Score (S <sub>gw</sub> )	3.77	14.21
Surface Water Route Score (S <sub>sw</sub> )	16.78	281.57
Air Route Score (S <sub>a</sub> )	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		295.78
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		17.20
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		9.94

DECLASSIFIED

WORKSHEET FOR COMPUTING S<sub>M</sub>

Date: 11/1/17 Initial: JK

232797



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Ground Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi-plier	HRS	Max. Score	PRO	
<b>1</b> Observed Release	<input checked="" type="radio"/> 0      45	1	0	45	0	
If observed release is given a score of 45, proceed to line <b>4</b> . If observed release is given a score of 0, proceed to line <b>2</b> .						
<b>2</b> Route Characteristics						
Depth to Aquifer of Concern	0 1 2 <input checked="" type="radio"/> 3	2	6	6	6	
Net Precipitation	0 1 <input checked="" type="radio"/> 2 3	1	2	3	2	
Permeability of the Unsaturated Zone	0 <input checked="" type="radio"/> 1 2 3	1	1	3	1	
Physical State	0 1 2 <input checked="" type="radio"/> 3	1	3	3	3	
Total Route Characteristics Score			12	15	12	
<b>3</b> Containment	0 1 2 <input checked="" type="radio"/> 3	1	3	3	3	
<b>4</b> Waste Characteristics						
Toxicity/Persistence	0 3 6 9 12 15 <input checked="" type="radio"/> 18	1	18	18	18	
Hazardous Waste Quantity	0 <input checked="" type="radio"/> 1 <input checked="" type="radio"/> 2 3 4 5 6 7 8	1	1	8	2	
Total Waste Characteristics Score			19	26	20	
<b>5</b> Targets						
Ground Water Use	0 <input checked="" type="radio"/> 1 2 3	3	3	9	3	
Distance to Nearest Well/Population Served	<input checked="" type="radio"/> 0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	0	
Total Targets Score			3	49	3	
<b>6</b> If line <b>1</b> is 45, multiply <b>1</b> x <b>4</b> x <b>5</b> If line <b>1</b> is 0, multiply <b>2</b> x <b>3</b> x <b>4</b> x <b>5</b>			2052	57.330	2160	
<b>7</b> Divide line <b>6</b> by 57.330 and multiply by 100			S <sub>gw</sub> = 3.58		3.77	

0 = HRS  
☐ = PRO

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Surface Water Route Work Sheet							
Rating Factor	Assigned Value (Circle One)		Multi- plier	HRS	Max. Score	PRO	
<b>1</b> Observed Release	0	<b>45</b>	1	45	45	45	
If observed release is given a value of 45, proceed to line <b>4</b> . If observed release is given a value of 0, proceed to line <b>2</b> .							
<b>2</b> Route Characteristics							
Facility Slope and Intervening Terrain	0	1	2	<b>3</b>	1	3	3
1-yr. 24-hr. Rainfall	0	1	<b>2</b>	3	1	2	3
Distance to Nearest Surface Water	0	1	2	<b>3</b>	2	6	6
Physical State	0	1	2	<b>3</b>	1	3	3
Total Route Characteristics Score				14	15	14	
<b>3</b> Containment	0	1	2	<b>3</b>	1	3	3
<b>4</b> Waste Characteristics							
Toxicity/Persistence	0	3	6	9	12	15	<b>18</b>
Hazardous Waste Quantity	0	<b>1</b>	<b>2</b>	3	4	5	6
					7	8	
					1	18	18
					1	1	8
Total Waste Characteristics Score				19	28	20	
<b>5</b> Targets							
Surface Water Use	0	1	<b>2</b>	3	3	6	9
Distance to a Sensitive Environment	0	1	2	<b>3</b>	2	6	6
Population Served/Distance to Water Intake Downstream	<b>0</b>	4	6	8	10	1	0
	12	16	18	20			
	24	30	32	35	40		
Total Targets Score				12	55	12	
<b>6</b> If line <b>1</b> is 45, multiply <b>1</b> x <b>4</b> x <b>5</b>				10,260			
If line <b>1</b> is 0, multiply <b>2</b> x <b>3</b> x <b>4</b> x <b>5</b>				64,350			
<b>7</b> Divide line <b>6</b> by 64,350 and multiply by 100				S <sub>sw</sub> = 15.94			
				16.78			